



Carrier[®]

Europe

The reference in

VIBRATING SOLUTIONS FOR BULK PROCESSING



Conveying



Drying



Feeding



Cooling



Screening



Shaking out

We Make Your Work Flow

www.carriereurope.be



CARRIER EUROPE

Carrier Europe is the European division of Carrier Vibrating Equipment Inc. (USA), a pioneer and lead manufacturer in vibrating equipment for bulk processing. We offer custom-made solutions, tailored to your needs, that can be designed for high capacity, high temperature (for abrasive, dusty or heavy products), food and chemical grade (with a safe and clean environment), from the most delicate granules to the bulkiest ones.

Vibrating technology applies harmonic motion to handle your product without degradation, and allows the completion of various processing functions while conveying, feeding or elevating it. While multifunctional, our designs require minimal maintenance and energy, making them reliable, long-lasting and suitable for a wide range of products and industries.

With a focus on custom-made solutions, our fine-trained engineers work with you to transform your specific needs into a unique piece of equipment.

On top of that, we benefit from a profound experience and a worldwide presence on after-sales support, with strategic parts warehouses and skilled technicians in Asia, Europe and Americas.



Global presence



70 years of experience



Custom-made equipment



Robust & reliable design



Low operational cost

Conveying through vibration

A vibrating conveyor moves materials by a series of tosses. To understand this principle, put a coin on a flat surface and apply different vibratory motions to the surface object: when applying an inclined motion following a straight line, the coin is conveyed at a speed relative to the frequency and amplitude of vibration.

Vibrating conveyors have several critical advantages over other types of conveying principles: with a trough as one-piece conveying surface, there is no spillage, no joints to cause contamination pockets or product spoilage. Abrasion is minimized, so the trough can be cleaned easily and is inherently self-cleaning. Special alloys can be used for the trough to handle extremely hot product materials. Generally, the only moving parts are in the drive, highly reducing maintenance and downtime.

The right choice for your application

Vibrating conveyors and equipment may be driven by brute force (direct drive) or natural frequency. In the first case the force inducing motion is provided by the drive, while in a natural frequency vibrating conveyor a large portion of the force comes from the spring system. This weightloaded spring assembly has a set natural frequency. When an external periodic force acts at the same frequency as the spring system, even with a very small magnitude, extremely large amplitudes of vibration can be obtained. In the past, the phenomenon of natural frequency has mainly been used for timing devices, until Carrier successfully applied it to industrial equipment design.

Natural frequency vibrating conveyors offer extra advantages:

Heavy weights and loads may be vibrated with a minimum of power consumption: once the vibration has been initiated by the drive, the spring system takes over and becomes the driving force.

Conveyors with almost unlimited length powered by a single drive: the springs uniformly distributed along the trough maintain a constant and identical stroke throughout its full length, whereas a direct drive conveyor would show some loss of stroke if longer than 16,5m resulting in a loss of material conveying speed.

Uniformly distributed springs also reduce deflection in the trough, thus reducing stress and risk of damage.

But vibrating is much more than just conveying !



Posi-Flow™ Vibrating Conveyor

Providing the most efficient system to simultaneously convey and process a variety of products, Carrier's natural frequency conveyors minimize power and maintenance requirements. With such reliability, they are particularly suited for production units operating 24/7, as in chemical and petrochemical plants, sugar factories, foundries,...

- Regular discharge flow
- No moving part in contact with product
- Abrasion-resistant liners or replaceable conveying surface
- Non-stick coatings
- Screening, metal-free and sorting functions



Fluid-Flow™ Fluid Bed

Designed to provide a continuous passage of air through the product bed, and a maximum surface contact with the product, for a more efficient thermal process at a minimum retention time. One unit can perform a variety of functions simultaneously, such as drying and cooling.

- High thermal efficiency
- Low particle degradation
- Multifunctional: can dry, cool or heat a product
- Excellent for high capacity production
- Easy adjustable retention time with direct drive systems



PUT US TO THE TEST !

Carrier specializes in custom solutions. We do not believe in rigid design, but work with you to better match the requirements of your process line.

Our research office is ready to adapt and improve any design, and our test facility can perform a complete analysis from a sample of your material behavior in any given process.

Spiral elevator

Used for conveying and processing where floor space is a concern. Can handle a wide range of delicate materials such as synthetic rubber, minerals, pharmaceuticals, dairy products, polymers, solid chemicals, plastics and explosives.

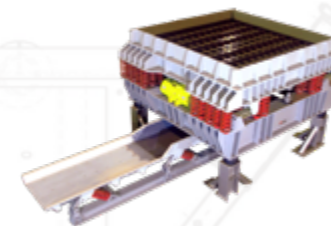
- Minimal floor space
- Low particle degradation
- Can dry, cool, heat or condition a product
- Covered for product protection
- Non-stick coatings



Ampli-Flow™ Vibrating Feeder

Driven by natural frequency for high capacity at minimum stress, or brute force for more muscle in a severe environment. They ensure a constant and controlled feeding from pinpoint dosage to large flow.

- Compact and rugged
- Constant and uniform flow
- Adjustable feed rate
- Scalping, screening, dewatering functions
- Furnace feeding or mold dumping for foundry



PARTS & SUPPORT

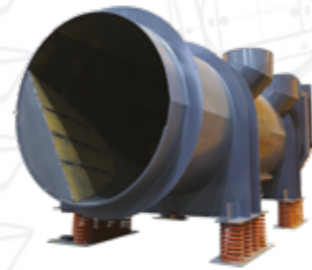
Not only do we offer long-lasting equipment, we also make sure they keep running at full efficiency by providing experienced technical support and spare parts aftersale service. The latter has recently been a growing part of our core business, showing the trust of our customers and our will to reduce their costs as well as the ecological impact of producing new equipment when the current one may yet have a couple more years to go.

For all spare parts orders or technical support, contact us at:

✉ service@carrierurope.be

Barrel Horse

Used in foundry industry. Its elliptical motion creates a vibrating sand bed for castings, blending them gently instead of a traditional « lift and drop » motion. This effectively cleans them while conditioning the sand.



- No overstroke
- Superior lump reduction for sand reuse
- Protects casting quality
- Efficient heat transfer for casting cooling
- Can convey even up an incline



Delta Phase® Shakeout

Compact foundry screener that allows sand to pass through specially designed perforated deck, with options like V-shaped for engine blocks, back drafted slots to prevent casting damage, or grizzly for maximum separation.

- Up to 100 tons in large workable area
- Adjustable angle of vibration
- Unlimited retention time
- Isolated design to reduce dynamic reaction
- Very low maintenance



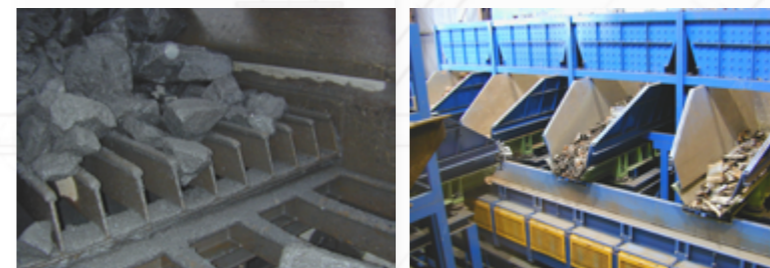
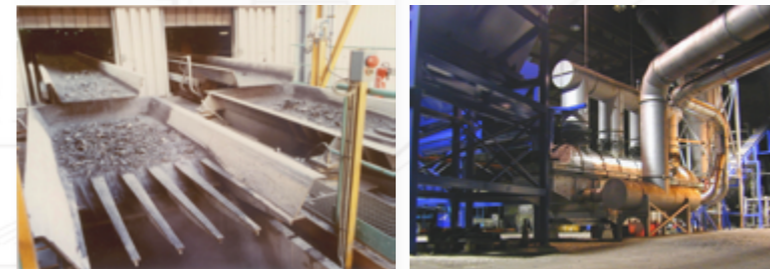
CARRIER'S EXCLUSIVE DELTA PHASE® SYSTEM

Created by Carrier, the Delta Phase® drive is an electronic shaft synchronization system utilizing a programmable logic controller (PLC). This control system is used to change the angle of vibration "on the fly", which in turn varies the retention time and force imparted on the mold.

It is very often used with our direct drive fluid bed systems as well.

A wide range of applications

Our successful and long-lasting installations are the best proof that Carrier Europe vibrating equipment is the economical effective partner to productivity and profitability in many industries worldwide.



Biomass



Chemicals



Fiberglass



Food & Cereals



Foundry



Minerals & coal



Plastics



Recycling



Rubber



Sand & Aggregates



Sugar



Wood



And many more...



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